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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/998,507	12/26/1997	ALBERT BAUER	1704345	2665
7590	07/06/2005		EXAMINER	
WILLIAM J. SAPONE COLEMAN, SUDOL, SAPONE P.C. 714 Colorado Avenue Bridgeport, CT 06605			FORD, JOHN K	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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08/998,507

EXAMINER

ART UNIT PAPER

06232005

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 08/998,507
Filing Date: December 26, 1997
Appellant(s): BAUER, ALBERT

MAILED

JUL 06 2005
Group 3700

Mr. William J. Sapone
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief received April 10, 2003.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

Note, a child of the present application, SN 10/273,068, with narrower claims, has recently passed to issue. A terminal disclaimer may have to be filed here should the rejections in present application not be sustained by the Board.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is incomplete. A correct statement of the status of the claims is as follows:

Claims 1-43 have been cancelled.

Claims 47-50, 61 and 63 have been withdrawn pursuant to an election requirement.

Claims 60 and 62 stand objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 44-46 and 51-59 have been finally rejected.

A notice of non-compliance (Paper No. 37, mailed 11/26/2003) was sent previously, noting this deficiency, but was vacated in a decision on petition dated March 11; 2005 (erroneously designated Paper No. 5).

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is deficient because it does not contain a concise explanation of the invention defined in the claims involved in the appeal, which refers to the specification by page and line number, and to the drawings by reference characters as required by 37 CFR 1.192(c)(5).

A notice of non-compliance (Paper No. 37, mailed 11/26/2003) was sent previously, noting this deficiency, but was vacated in a decision on petition dated March 11, 2005 (erroneously designated Paper No. 5).

Specifically, the Summary does not specify what disclosed control algorithm or disclosed structure corresponds to the claim limitation "means for regulating an increase in the pressure in at least one room relative to an outside pressure, to vary the room pressure in correspondence to the selected room temperature" (emphasis supplied), which refers to the specification by page and line number, and to the drawings by reference characters as required by 37 CFR 1.192(c)(5).

The Examiner's position on this matter was set forth in Paper No. 37, beginning at the bottom of page 2 and extending to the top of page 4 and that explanation is incorporated here by reference. It appears, to the Examiner, that the meaning ascribed by the Board to this limitation will ultimately decide this Appeal.

While Appellant argues in the Petition under 37 CFR 1.181 (a) (1) (Paper No. 38, received December 15, 2003), that the Summary is sufficient as it stands, he does shed light on how the **room pressure** is related to the **regulated pressure in the supply duct** and given that this issue will, in all probability, ultimately decide this appeal, it will be carefully addressed in the arguments section of this Examiner's Answer.

(6) *Issues*

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: With respect to the rejections of claims 45 and 46, the rejections are based on any of the prior art applied to claim 44 (which means either Johannsen, alone, or Johannsen in view of Rayburn, in both cases).

(7) *Grouping of Claims*

Appellant's brief includes a statement that Group I, claims 44 and 51-59, do not stand or fall together with Group II, claim 45 and Group III, claim 46. Appellant's brief provides reasons (and separate arguments) as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *ClaimsAppealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,257,318	Johannsen	03-1981
5,971,067	Rayburn et al.	10-1999 (filed 02-15-1996, before
Appellant's earliest priority date under 35 U.S.C. 119)		
4,347,712	Benton et al.	09-1982
4,189,094	Robinson	02-1980

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 44 and 51-59 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Johannsen.

Commencing with the last full paragraph on page 5 of the Brief and ending at the bottom of page 7 of the Brief Appellant effectively concedes that but for the "means for regulating an increase in pressure in the at least one room relative to an outside pressure, to vary the room pressure in correspondence to the selected room temperature", the Johannsen reference answers to all of the claim limitations.

In Johannsen, a supply air blower 10 is driven by an induction motor (col. 5, lines 43-44), through a supply air channel 20, through damper control boxes (21a and 21b) that are each controlled by separate thermostats in the zones or rooms of the building with which the air discharge from the associated damper control box (21a and 21b) that their air discharge is associated with (as disclosed in column 4, lines 36-47, incorporated here by reference.

While Johannsen discloses an evaporator or cooling coil 17, in exemplary fashion in column 4, lines 31-35, Johannsen clearly contemplates the use of his invention in a ventilation, heating or cooling system for a building (see, col. 1, lines 7-16 and 19-27). Moreover the "means for adjusting a temperature of the supply air" recitation in Appellant's claim 44 is met by the evaporator 17 alone, notwithstanding the superfluous "cooling-heating" prefacing the word "means" in claim 44. Even giving the term "cooling-heating" its broadest reasonable meaning the claim is met, because "cooling-heating" is taken to mean cooling or heating given the breadth or the functional part of the recitation. Appellant never argues the point and it is moot in the rejection based on the combined teachings of Johannsen and Rayburn (discussed later) because Rayburn shows a heating/cooling means 12.

Thus, the only issue for the Board to decide is whether or not Johannsen satisfies the limitation "means for regulating an increase in pressure in the at least one room relative to an outside pressure, to vary the room pressure in correspondence to the selected room temperature" and to do that the Board will first have to decide what it means. The Board should note that only the supply fan and its regulation is being

claimed in claim 44. No exhaust fan in claim 44 is claimed, even though both Appellant (see fan 16) and Johannsen (see fan 11) use regulated exhaust fans that, in the Examiner's view, operate in a similar manner. The point is that the functional statement "means for regulating an increase in pressure in the at least one room relative to an outside pressure, to vary the room pressure in correspondence to the selected room temperature" can apparently be accomplished entirely by Appellant's supply fan 15. Appellant best sets forth an explanation of how this is accomplished not in his Brief, but in the Petition under 37 C.F.R. 1.181(a)(1) (Paper No. 38, received December 15, 2003). Beginning four lines from the bottom of page 2 through page 4, line 8 of Paper No. 38, Appellant explains, using an analogy, that a pressure of the room tends to follow the regulated pressure in the supply duct feeding the room as the air in a vehicle tire being filled from a regulated source at the filling station ultimately reaches the regulated pressure of the source.

Ultimately it may be unnecessary to understand Appellant's own disclosure to answer the relatively simple question presented here of whether the recitation "means for regulating an increase in pressure in the at least one room relative to an outside pressure, to vary the room pressure in correspondence to the selected room temperature" is met by Johannsen.

The Examiner approaches this question in two parts since the recitation itself is compound in nature (i.e "means for regulating an increase in pressure in the at least one room relative to an outside pressure, to vary the room pressure in correspondence to the selected room temperature"). The first question is does

Johannsen answer to the bolded limitation in the immediately preceding quote. Figure 5 of Johannsen and the description thereof beginning at col. 12, line 39, clearly discloses regulating the exhaust blower to be a fixed CFM (cubic feet per minute of air flow) below the supply air blower CFM. This clearly varies the room pressure relative to the outside pressure. "In actual practice the return blower is operated at slightly less than the values indicated in FIG. 5 so that a slight positive pressure will be maintained in the building to prevent infiltration and to establish exfiltration therethrough." (quoting col. 12, lines 59-61 of Johannsen). The Examiner submits that it is beyond question that Johannsen maintains the increase in pressure in at least one room relative to the outside pressure by the action of his two regulated supply and exhaust fans (as described above).

Turning to the remaining portion of Appellant's the means plus function limitation (i.e. "means for regulating an increase in pressure in the at least one room relative to an outside pressure, **to vary the room pressure in correspondence to the selected room temperature**"), it is submitted that Johannsen also does this. There is a clear variation of the room pressure in correspondence with the selected room temperature as disclosed in col. 4, lines 36-47 of Johannsen. As disclosed in Johannsen, the damper boxes 21a and 21b are each thermostatically operated by a separate thermostat in each room associated with the discharge of conditioned air from that damper box into the room. As is conventional knowledge to those of ordinary skill in this art, when the thermostat senses the room is too hot in the summer, it signals its associated damper box to open to let temperature conditioned air into the room and

likewise when the thermostat senses the room has been cooled to the set point temperature, it signals the associated damper box to close to stop conditioned air flow into the room (to prevent over-cooling). As disclosed by Johannsen "these temperature loops are not part of the pressure control system [of Johannsen] and have therefore been omitted from FIG. 1. Even though they have been omitted because of their conventionality, they must be present for the Johannsen system to temperature condition the individual rooms.

It is absolutely clear that the room pressure must vary as a function of the selected room temperature (set on the thermostat) in each room in Johannsen. When the damper unit opens, responsive to a call for conditioned air from its associated thermostat, the room pressure rises just as described by Appellant in his Petition under 37 C.F.R. 1.181(a)(1) (Paper No. 38, received December 15, 2003). Beginning four lines from the bottom of page 2 through page 4, line 8 of Paper No. 38, Appellant explains, using an analogy, that a pressure of the room tends to follow the regulated pressure in the supply duct feeding the room as the air in a vehicle tire being filled from a regulated source at the filling station ultimately reaches the regulated pressure of the source. Basically, each room in Johannsen, to use Appellant's analogy, is like a tire and when the thermostatically controlled damper unit opens, the air from the pressure regulated supply duct (which supply duct pressure must be at a higher pressure than the room pressure, otherwise the supply air would not enter the room, just as the air pressure at the filling station is set to a regulated pressure higher than the pressure

prevailing in the tire by the time the driver notices it is "low") flows into the room and builds up the pressure.

It is therefore submitted using Appellant's own analogy and the most basic and fundamental understanding of one of ordinary skill in this art that every time the damper unit opens, in Johannsen, the pressure in the room will increase **to vary the room pressure in correspondence to the selected room temperature**. When the room thermostat closes its associated damper unit, the room pressure will be lower than when the room thermostat opens the damper unit, because of the change of airflow into the room from the supply air duct. To put it as simply as possible, room pressure varies when air flows into or out of it, just as tire pressure varies when air flows into it or out of it.

Thus, both prongs of the compound means plus function limitation are met by Johannsen, notwithstanding Appellant's remarks to the contrary.

In pages 5-7 of the Brief Appellant simply ignores the thermostatic control of the damper units 21a and 21b in Johannsen and how they vary the pressure in each of their associated rooms. Ultimately such an argument must fail because it doesn't respond to, or even seem to appreciate, the entirety of the Johannsen disclosure. Just because the overall building is under a slight positive pressure by the action of the slower running exhaust fan is unrelated to the action of the supply damper units 21a and 21b opening and closing the supply duct to the space and Johannsen specifically states that the "temperature control loops are not part of the pressure control system of the present

invention" (Johannsen, col. 4, lines 45-46, quoted approvingly in Appellant's Brief, page 7, second full paragraph).

Claims 44 and 51-59 are rejected under 35 U.S.C. 103(a) as being obvious over Johannsen in view of Rayburn et al. This rejection is set forth in a prior Office Action, mailed on July 2, 2002.

Claim 45 is rejected under 35 U.S.C. 103(a) as being obvious over any of the prior art applied to claim 44 above (i.e. Johannsen, alone, or Johannsen in view of Rayburn et al.) and further in view of Benton et al. This rejection is set forth in a prior Office Action, mailed on July 2, 2002.

Claim 46 is rejected under 35 U.S.C. 103(a) as being obvious over any of the prior art applied to claim 44 above (i.e. Johannsen, alone, or Johannsen in view of Rayburn et al.) and further in view of Robinson. This rejection is set forth in a prior Office Action, mailed on July 2, 2002.

Significant explanation of why the Examiner maintained these rejections is found at the beginning of the Final Office action mailed July 2, 2002 and those comments are to be understood to be incorporated into the applicable rejection. A copy of the Final rejection appears as an Appendix to this Examiner's Answer.

(11) Response to Argument

I. Johannsen (under 35 USC 102(b))

The Examiner has answered all of Appellant's arguments above.

II. Johanssen in view of Rayburn

A response to this rejection begins on page 8 of the Brief and further attacks Johanssen with a series of erroneous "facts" about the reference. Drawing Figure 4 in Johanssen (line 143, specifically) is a graph of the lowest supply air pressure in the supply duct (see col. 9, lines 63-64), which is determined by sampling a plurality of pressure transducers (e.g. 25a) to find the lowest value (see col. 5, lines 4-21) not a graph of the pressure in the room. Appellant points to col. 10, lines 40-67, where it states that the supply duct pressure starts to go lower when the damper units (21a and 21b) open up to dump higher pressure conditioned air into their associated rooms. Yes, the duct pressure decreases. Why, because the air rushing out of the duct is increasing the room pressure! All that happening is that high pressure air is flowing to a lower pressure area in an attempt to equalize the pressure. The room pressure must necessarily increase (i.e. vary) in this process. The supply duct pressure is constantly varying as well as different thermostatically controlled dampers open and close and different pressure sensors (e.g. 25a) are sampled and selected if they have the lowest value. The notion that Appellant advances that the supply duct pressure is constant simply doesn't comport with reality. The supply duct pressure is constantly varying responsive to the temperatures measured by the room thermostats changing and thereby opening and closing different damper units and thereby causing the supply duct pressure to vary depending on the selected room temperature.

Rayburn shows a combined heating/cooling unit at 28 in Figure 1 and 154 in Figure 2 (see col. 7, lines 13-20), if it is even necessary to meet the terms of Appellant's claim 44. Rayburn also discloses damper units (102, 104, 106 and 108) in Figure 2 that are configured to open and close as their associated space temperature thermostats (122, 124, 126 and 128) call for cooling or heating (as described in column 7, lines 1-12).

Appellant concedes on page 9 of the Brief that Rayburn teaches the type of conventional behavior that the Examiner has relied upon for it to teach, but goes back to the previously made, erroneous, argument that Johannsen tries to keep the pressures in the individual rooms a constant. Again, Appellant erroneously suggests that Johannsen uses the dead band controller to maintain room pressure constant when, in fact, Johannsen uses the dead band controller to maintain the pressure at each monitored spot in the supply duct at or in excess of some pressure set point (Johannsen, column 7, lines 64-66). If a particular room is connected with the supply duct whose pressure is varying as a consequence of a low pressure generated by another room being connected to the supply duct by its associated damper, it is inevitable that both rooms will feel the effects of such a variation in the supply duct pressure. Appellant, it is submitted, has simply claimed his invention too broadly.

III. Benton

Appellant attacks Benton for what it doesn't show, implicitly conceding that it does disclose supply air temperature variation through control of the heating and

cooling equipment controllers 31 and 32, connected to cooler 23 and heater 24. Unable to traverse the rejection based on the duct pressure control system of Johannsen, Appellant confuses the issue here by relying on the duct pressure controller of Benton. Benton was never relied upon for any sort of pressure control disclosure, as Appellant is well aware. The Examiner simply refuses to take up this line of argument in any detailed manner, because it is simply extraneous. Benton was not relied upon for his pressure control teaching and, notwithstanding that, the same logic applies to Benton's room pressures varying as a function of their selected temperatures even if the supply duct pressure is maintained constant. Nonetheless, that is not the rejection before Appellant or before the Board.

IV. Robinson

Again, Appellant sidesteps what the reference (Robinson) was relied upon to disclose, which is found in the first sentence of the Abstract, namely, automatically varying the degree of ventilation responsive to variations in outdoor temperature in a building that happens to have a swimming pool in it. It is submitted that the disclosure is highly relevant to claim 46. It clearly discloses in Figure 3, a graph of the ventilation rate as a function of outdoor temperature that saves energy ("reduces running costs" Robinson, col. 1, lines 21-28). To have implemented such a ventilation control scheme into Johannsen (for example, if Johannsen's system serviced a swimming pool) would have required the fan speeds in Johannsen to be varied as a function of outdoor temperature in the manner taught by Figure 3 of Robinson. This would have

necessarily required that the air flow through supply fan 10 Johanssen be regulated with respect to outdoor temperature as taught by Figure 3 of Robinson. By the action of Johanssen's regulated exhaust fan 11 following the supply fan RPM to maintain the space at a slight positive pressure (Johannsen, col. 12, lines 57-61), it inexorably follows that room pressure would be regulated as a function of the outdoor air temperature, as described by Appellant in his Petition under 37 C.F.R. 1.181(a)(1) (Paper No. 38, received December 15, 2003). Beginning four lines from the bottom of page 2 through page 4, line 8 of Paper No. 38, Appellant explains, using an analogy, that a pressure of the room tends to follow the regulated pressure in the supply duct feeding the room as the air in a vehicle tire being filled from a regulated source at the filling station ultimately reaches the regulated pressure of the source. Basically, each room in Johanssen, to use Appellant's analogy, is like a tire and when the thermostatically controlled damper unit opens, the air from the pressure regulated supply duct (which supply duct pressure must be at a higher pressure than the room pressure, otherwise the supply air would not enter the room, just as the air pressure at the filling station is set to a regulated pressure higher than the pressure prevailing in the tire by the time the driver notices it is "low") flows into the room and builds up the pressure.

Appellant points out that Robinson keeps the same fan outputs for fans 17 and 18. This is clearly a preference not a requirement of the system. There is no reason why the building couldn't be run at a slight over-pressure as taught by Johanssen to advantageously discharge the bathroom air and chlorinated air outdoors (i.e. to blow the

bad odors outdoors). Appellant also argues Rayburn doesn't disclose what Johanssen already discloses (in regard to claim 44). Having addressed this argument numerous times before the Board is directed to those portions of this Examiner's Answer.

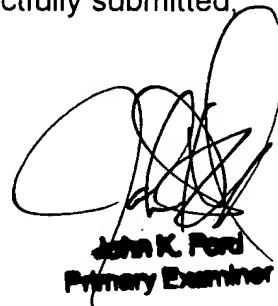
In the last paragraph of the Brief (Brief, pages 11-12), Appellant suggests that the prior art relied upon by the Examiner provides "constant pressure" regardless of volume air flow. As stated previously, this is completely erroneous in so far as it applies to room pressure. Appellant goes on to state that "room pressure is a controlled variable", however it is noted that it is supply duct pressure and exhaust duct pressure that are regulated according to Appellant's Summary of the Invention on pages 2-4 of the Brief, not room pressure, thus Appellant's statement is incommensurate with what is disclosed in the Summary of the Invention.

All of the purported advantages at the bottom of page 11 of the Brief do not appear in any claim and hence are of no moment. Appellant has claimed too broadly. The Examiner invites the Board to consider the videotape, as does Appellant, however, based on a fading recollection, there is little there that would shed any light on the present disclosure.

The examiner requests the opportunity to present arguments at the oral hearing if one is held.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



John K. Ford
Primary Examiner

JKF
June 27, 2005

Conferees

Gene Mancene (SPE, AU 3753)
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Art Unit: 3753

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APPENDIX copy of the FINAL REJECTION (mailed July 2, 2002)

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Office Action Summary	Application No.	Applicant(s)	
	08/998507	Bauer	
	Examiner FORD	Art Unit 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 March 2002

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 44-63 is/are pending in the application.

4a) Of the above claim(s) 47-50, 61 & 63 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 44-46, 51-59 is/are rejected.

7) Claim(s) 60 and 62 is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892)

16) Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

18) Interview Summary (PTO-413) Paper No(s) _____

19) Notice of Informal Patent Application (PTO-152)

20) Other: _____

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Applicant's response of March 12, 2002 (Paper No. 29) has been carefully considered.

Applicant argues that Johannsen has no "means for regulating an increase in pressure in the at least one room relative to an outside pressure, to vary the room pressure in correspondence to the selected room temperature". The Examiner disagrees.

Figure 5 of Johannsen and the description thereof beginning at col. 12, line 39 clearly discloses regulating the exhaust blower to be a fixed CFM below the supply air CFM. This clearly varies the room pressure relative to the outside so "that a slight positive pressure will be maintained in the building to prevent infiltration and to establish exfiltration therethrough (col. 12, lines 59-61). The regulation is done by control circuitry actuating intake vanes 37 associated with the inlet of the blower. Moreover there is a clear variation of the room pressure in correspondence to the selected room temperature, as disclosed in col. 4, lines 36-47. It is conventional in this art to have the dampers in damper control boxes 21a and 21b in Figure 1 open and close to modulate the amount of conditioned air entering a room (or zone) based on the temperature sensed in the thermostat located in that room (or zone).

Like Johannsen, applicant discloses a series of control systems which together ^{co-ad} ~~coact~~ to produce the result claimed in the last clause of claim 44.

Applicant's comments with respect to the other references are similarly unconvincing. With respect to Rayburn applicant ignores the specific Figure and description that the Examiner called to his attention and instead argues an air quality sensor (irrelevant to the claims at issue

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here) in Rayburn behaves in some other manner. Rayburn was only used to illustrate how conventional thermostatic room dampers operate and nothing more.

With respect to Benton, applicant appears to concede that it teaches the subject matter of claim 45, because applicant fails to argue that it doesn't. The same is true of Robinson with regard to claim 46.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 44 and 51-59 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Johannsen (4,257,318).

See col. 2, lines 3-15 and Figure 5, in particular.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 44 and 51-59 rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 44 and 51-59 above, and further in view of Rayburn et al. (5,971,067).

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Rayburn discloses in Figure 2, and col. 7, lines 1-12 how conventional zone air-volume controllers work. The explanation in Johannsen is quite abbreviated, however it is clear from the state of the art that Johannsen is disclosing a variable air volume system such as shown by Rayburn and, to the extent that it is necessary, it would have been obvious to have used Rayburn's room temperature controlled dampers in Johannsen.

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of the prior art as applied to claim 44 above, and further in view of Benton et al. (4,347,712).

To vary supply air temperature of Johannsen in the manner taught by Benton to save energy would have been obvious to one of ordinary skill.

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of the prior art as applied to claim 44 above, and further in view of Robinson (4,189,094).

Robinson teaches varying the amount of ventilation of a building responsive to outdoor temperature. To have varied the pressure set point of the supply fan to increase the fan speed of Johannsen in response to outdoor temperature as taught by Figure 3 of Robinson to save energy would have been obvious to one of ordinary skill.

Claims 60 and 62 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

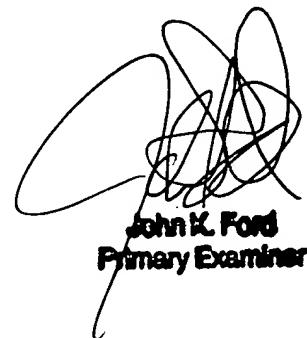
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to John Ford at telephone number 308-2636.

J. FORD:th
June 29, 2002



John K. Ford
Primary Examiner